Application No. 10/588,679 Amendment dated March 10, 2009 After Final Office Action of December 10, 2008

REMARKS

Claims 1-16 and 18-21 are pending. Claim 21 is withdrawn. Claims 7, 14, and 18-20 are currently amended. Claims 17 is cancelled without prejudice or disclaimer. Upon entry of the present amendment, claims 1-16 and 18-21 will be pending in the application. Claim 21 is withdrawn pending a decision regarding rejoinder.

Support for the amendment of the claims is found throughout the specification and claims as originally filed. No new matter has been added.

Amendment and cancellation of the claims herein are not to be construed as acquiescence to any of the rejections/objections made in the instant Office Action or in any previous Office Action, and were done solely to expedite prosecution of the application. Applicants hereby reserve the right to pursue the claims as originally filed, or substantially similar claims, in one or more subsequent patent applications.

Objection to the Specification

The objection to Figure 1 is overcome by the submission herewith of a replacement drawing that deletes "(Sheet 1 of 26)".

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejects claims 7, 14, and 20 for allegedly being indefinite. Applicants respectfully disagree and traverse the rejection. However, without in any way acquiescing to the rejections/objections and in order to expedite prosecution of the application, the claims have been amended as set forth above, thereby obviating the rejection.

Specifically, claim 7 has been amended to recite a homodimer or heterodimer consisting of two polypeptides having sequences SEQ ID NOs: 51, 53, 55, 57, 59, or 61. Applicants thank the Examiner for his input in more clearly and distinctly claiming the invention. Accordingly, the indefiniteness rejection of claim 7 should be withdrawn.

Claim 14, from which claims 15, 16, and 18 depend, has been re-written to more clearly and distinctly claim the invention. Claim 14 now recites a method of screening compositions for opioid binding activity that involves contacting a cell expressing an MOR-1 splice variant

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polypeptide of SEQ ID NOs: 51, 53, 55, 57, 59, or 61 with a composition and an opioid; measuring the physiologic effect of the composition and the opioid on the cell, relative to their effect on a control cell, where determination of binding of the composition is expressed relative to that of the opioid. Support for the amendment is at least found at Example 2, where Applicants describe the characterization of splice variants of the Oprm gene by analyzing the affinity of binding to various opioids, ability of the opioids to stimulate [35 S] GTP- γ -S binding, and the effect in adenylyl cyclase assays (pages 46 and 47). Accordingly, the indefiniteness rejection of claims 14-16 should be withdrawn.

Claim 19, from which claim 20 depends, has been re-written to more clearly and distinctly claim the invention. Claim 19 now recites a method of screening compositions for opioid binding activity that involves contacting an MOR-1 splice variant polypeptide of SEQ ID NOs: 51, 53, 55, 57, 59, or 61, with a composition and an opioid; measuring binding of the composition and the opioid to the MOR-1 splice variant polypeptide; and comparing MOR-1 splice variant polypeptide binding of the composition to MOR-1 splice variant polypeptide binding to the opioid, where determination of binding of the composition is expressed relative to that of the opioid. Support for the amendment is found, at Example 1, where Applicants describe competition studies with a variety of opioids (page 43 and Table 3), and at Example 2, where Applicants describe the characterization of splice variants of the Oprm gene by analyzing the affinity of binding to various opioids (pages 46 and 47; and at claim 19 as originally filed). Accordingly, the indefiniteness rejection of claim 19 should be withdrawn.

Allowable Subject Matter

Applicants acknowledge with appreciation that the Examiner has found that claims 1-6 and 8-13 satisfy the requirements for patentability.

Rejoinder of Claims 20 and 21

The Examiner has indicated that claims 20 and 21 should be cancelled upon allowance of the elected claims, but could be rejoined if they meet the requirements for patentability.

Claim 20 has been amended to depend correctly from claim 19. Applicants respectfully request rejoinder of claims 20 and 21.

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CONCLUSIONS

In view of the above amendment, Applicants believe the application is in condition for allowance. Accordingly, Applicants respectfully request entry of the amendments and remarks presented herein, favorable reconsideration and withdrawal of all pending rejections/objections, and respectfully request rejoinder of claims 20 and 21 and issuance of a Notice of Allowance of the application with claims 1-16 and 18-20. Should any issues remain or should the Examiner believe that a telephone conference with Applicants' attorney would be helpful in expediting prosecution of this application, Applicants invite the Examiner to contact the undersigned at the telephone number shown below.

Applicants believe that no fee is due to consider the present amendment. Nevertheless, Applicants hereby authorize the Director to charge or credit any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105 under Order No. 62078(51590).

Dated: March 10, 2009

Respectfully submitted,

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